

Claims

- [c1] 1. A multimedia I/O system for communicating information between a computer and a user, further comprising: a movable figure having means to move under control of the computer; speaker means, electrically attached to the movable figure, for outputting audio data from the computer; and microphone means, electrically attached to the movable figure, for inputting voice data to the computer; whereby the multimedia I/O system acts as an intermediary communications device between a computer and an individual that communicates via audio output, voice input, and visual motion output.
- [c2] 2. A system, as in claim 1, wherein: the movable figure communicates with the computer via a wireless link.
- [c3] 3. A system, as in claim 2, wherein: the movable figure further comprises a base unit and a movable figure.
- [c4] 4. A system, as in claim 1, further comprising: means to remotely locate the movable figure from the

computer.

- [c5] 5. A system, as in claim 4, further comprising:
means to communicate with the remote computer over a network.
- [c6] 6. A system, as in claim 5, further comprising:
means to transmit voice data over a network.
- [c7] 7. A system, as in claim 6, further comprising:
means to select a voice from a voice data set and substitute the selected voice for the input voice data.
- [c8] 8. A system, as in claim 1, further comprising:
means to select a voice from a voice data set and substitute the selected voice for the input voice data.
- [c9] 9. A system, as in claim 8, further comprising:
means to enter user voice data into the voice data set;
and
means to output the user's voice data from the voice data set.
- [c10] 10. A system, as in claim 3, further comprising:
a base unit, having means to removably attach to the movable figure, and further having means to movably control the motion of the movable figure; and
the movable figure having means to attach to the base

unit.

[c11] 11. The system, as in claim 1, wherein:
the movable figure communicates directly with the computer.

[c12] 12. A system, as in claim 1, wherein:
the multimedia I/O device can be automatically activated by the computer to provide programmed alarms and/or timed messages.

[c13] 13. A multimedia I/O system for communicating with a computer, further comprising:
a plurality of multimedia I/O devices, each multimedia device further comprising:
motion output means, having means to communicate via motion;
speaker means, electrically attached to the movable object, for outputting audio data; and
microphone means, electrically attached to the movable object, for inputting voice data to a computer;
whereby the multimedia I/O devices act as intermediary communications device which communicates via audio output, voice input, and motion.

[c14] 14. A system, as in claim 13, wherein:
each of the multimedia I/O devices communicates di-

rectly with the computer.

- [c15] 15. A system, as in claim 13, further comprising:
at least one base unit, the base unit having means to attach to a multimedia I/O device;
the base unit communicates further comprises a wireless communications link.
- [c16] 16. A system, as in claim 14, wherein:
at least one of the plurality of multimedia I/O devices is located at a remote location from computer.
- [c17] 17. A system, as in claim 13, wherein:
the multimedia I/O device outputs notification of system events, including e-mail, incoming user messages, system status messages, and scheduled messages.
- [c18] 18. A system, as in claim 13, wherein:
the multimedia I/O device is used as a movable game figure in conjunction with software games.
- [c19] 19. A system, as in claim 13, wherein:
the multimedia I/O device is used to represent individuals in a chat room.
- [c20] 20. A system, as in claim 18, wherein:
movable multimedia I/O devices are used to represent individual players in multiplayer games.

[c21] 21. A multimedia I/O system for communicating information between a computer and a user, further comprising:

a computer having a programmable processor and storage means for storing at least one computer program, the computer program further having means to execute programming instructions for controlling a movable figure;

a movable figure having means to move under control of the computer program; and

speaker means for outputting audio data under control of the computer program;

whereby the multimedia I/O system acts as an intermediary communications device between a computer program and an individual that communicates via audio output and motion output.

[c22] 22. A system, as in claim 21, further comprising:

interface means for communicating between computer programs and the movable figure, for receiving output audio data for output by the speaker means, and for receiving instructions from the computer programs for controlling movement of the movable figure.

[c23] 23. A system, as in claim 22, further comprising:

microphone means for inputting audio data;

means to transfer the input audio data to a computer program via the interface means; and the computer program having means to respond to the input audio data by outputting audio data and instructions for controlling movement of the movable figure; whereby the user can interact with a computer program by inputting audio data to the computer program, and receiving audio and motion output from the computer program.

- [c24] 24. A system, as in claim 23, further comprising: communication means in the computer to communicate with a network of computers, the communication means further having means to receive software instructions from remote computers for controlling the movable figure and for inputting and outputting data to the movable figure.
- [c25] 25. A system, as in claim 23, further comprising: means to automatically output audio data and/or move the movable figure when a preselected event is detected.
- [c26] 26. A system, as in claim 25, wherein: the preselected event is a system error, a timed event, or an alarm.
- [c27] 27. A system, as in claim 23, further comprising:

voice data collection and storage means to store a variety of voice data types from a variety of sources; means to select voice data stored in the voice data collection and storage means by entering voice commands into the microphone, and outputting the selected voice data via the speaker.

[c28] 28. A system, as in claim 10, wherein:
the speaker means and the microphone means are integrated into the base unit.

[c29] 29. A system, as in claim 10, wherein:
the multimedia I/O device includes a universal adapter for attachment to the base unit;
the base unit includes a universal adapter, which corresponds to the universal adapter on the multimedia I/O device, for attachment to a multimedia I/O device; and
the universal adapter on the multimedia I/O device is removably attached to the universal adapter on the base unit such that the base unit can be attached to different multimedia I/O devices;
whereby the base unit and the multimedia I/O device have mutually corresponding and detachable universal adapters which allow different multimedia I/O devices to be used in conjunction with a single base unit.

[c30] 30. A system, as in claim 21, further comprising:

a manual input device, mainly a game controller, a joystick, a mouse, or a keyboard for inputting data to the computer for controlling the multimedia I/O device.

[c31] 31. A system, as in claim 18, further comprising:
monitoring means to monitor user activity to determine if a specific instruction has been entered, if a specific event has occurred, or if a predetermined time period has been exceeded; and
means to automatically activate a predetermined response under control of the monitoring means if the specific instruction was entered, if the specific event occurred, or if the predetermined time period was exceeded.

[c32] 32. A system, as in claim 23, further comprising:
means to input voice data to the microphone associated with the multimedia I/O device;
means to output the voice data to a speaker associated with a second multimedia I/O device.

[c33] 33. A system, as in claim 23, further comprising:
a base unit having holographic projection means for projecting a holographic image; and
the movable figure is the holographic image.